

TRANSIENT CANCELLATION TECHNIQUE
FOR SPACECRAFT SOLAR WING STEPPING

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus for controlling a plurality of solar panels of a spacecraft is described. The method comprises the steps of providing a first step command to a first solar panel, and providing a second step command to a second solar panel at a time of a transient zero-crossing of a dynamic response of the spacecraft body to the first step command, wherein the second solar panel is disposed on an opposite side of the spacecraft
10 from the first solar panel. The apparatus comprises a processor; a first solar panel driver, communicatively coupled to the processor, for providing a first step command to a first solar panel, and a second solar panel driver, communicatively coupled to the processor, for providing a second step command to a second solar panel at a time of a transient zero-crossing of a dynamic response of the spacecraft body to the first step command.

"Express Mail" mailing label number EV329955254US
Date of Deposit NOVEMBER 26, 2003
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
SURIE MCCLAVE
(printed name)
[Signature]
(signature)